

# The Fundamentals of Asset Management A Hands-On Approach



### USEPA Asset Management Workshop



# **September 9-10, 2008**

Training Center:
Monona Terrace Conference Center
One John Nolan Drive
Madison, WI 53703

#### Sponsored by:

United States Environmental Protection Agency

Central States Water Environment Association

### Registration Deadline: August 29, 2008 (Register Early – Space is Limited)

<u>The Challenge:</u> Over the past half century, America has spent trillions of dollars building some of the finest infrastructure that history has ever seen. This investment has played a substantial role in the sustained prosperity and quality of life of our country. But in many communities, this infrastructure is severely stressed from overuse, under funding of maintenance and renewal, and aging.

A comprehensive approach to managing our capital assets is overdue – one that brings "state of the practice" advanced asset management (AM) concepts, tools, techniques, and technologies to bear on managing for cost-effective performance. This approach focuses relentlessly on providing sustained performance to the customer at the lowest life-cycle cost and at an acceptable level of risk to the organization.

<u>The Focus:</u> Public sector managers have been managing assets for decades. However, it is clear that what we have been doing in the past will not be sufficient to address the growing and increasingly complex challenges that lie ahead. Practical, advanced techniques for better management of assets have been developed and refined in both the private sector in the US and in water and wastewater agencies around the world. Management thinking is centered on long-term effectiveness, service sustainability, and effective environmental management. How can these advanced asset management concepts, tools and techniques be most effectively transferred into the water and wastewater industry, more specifically, into your agency? Where to start? How to proceed? How to select appropriate tools?

<u>The Workshops:</u> The AM challenge for US agency officials is one of "knowledge transfer." **For that reason, these workshops have been designed as an extensive hands-on experience.** Each workshop:

- ♦ Incorporates a real-world storyline to realistically demonstrate an advanced asset management way of approaching difficult asset-driven problems.
- Is built around participant exercises that demonstrate the concepts, techniques and tools of advanced asset management.
- Is centered on **case-based mentoring** by expert asset management practitioners.

The agenda is built around five core AM questions. The workshops focus on demonstrating, step-by-step, how an agency would select and deploy "Best Appropriate AM Practices" that are best suited to that agency.



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### **Agenda Highlights**

Day One

7:30 a.m. – 8:00 a.m. Continental Breakfast and Name Badge Pick-up

8:00 a.m. – 4:30 p.m. Duration of Workshop Introductions

#### **Background and Context**

- The Changing Utility Industry
- The Emerging Utility Of Tomorrow

# **Introduction of Storyline, Overview of Fundamental Concepts and Core Practices**

- Introduction Of Storyline
- A Definition Of AM
- A "Meta View" of the AM Paradigm
- Managing The Asset Base's "Potential To Fail"
- Payoffs And Benefits, Downsides
- The "Five Core Questions" and the "10-Step AM Process"

#### Storyline and Worksheets - Tom's Bad Day Core Question 1: What Is The Current State Of My Assets?

- What is an Asset?
- Building a "Process Layout" Schematic
- Creating The "Asset Hierarchy"
- Defining The "Data Standard"
- Initial Condition Analysis, Remaining Physical Life
- The Four Major Failure Modes
- Determining Replacement Value
- Financial Accounting versus Managerial Accounting

# Core Question 2: What Is My Required "Sustainable" Level Of Service (LOS)?

- What Is "LOS"? Why Do It?
- How It Works (Strategic Level Versus Operations Level)
   Core Question 3: Which Assets Are Critical To Sustained

# Performance? Understanding How My Assets Can Fail - the Four Major

- Understanding How My Assets Can Fail the Four Major Failure Modes
- Determining The "Likelihood Of Failure"
- Determining The "Consequences of Failure"
- How to Measure Our Agency's "Business Risk Exposure"?

#### Discussion, Q & A and Feedback

Day Two

7:30 a.m.-8:00 a.m. Continental Breakfast 8:00 a.m.-3:45 p.m. Duration of Workshop Summary of Day 1, Outline Of Day 2 Core Question 4: What Are My Best Minimum Life-Cycle-

- Cost CIP And O&M Strategies?What Alternative "Treatment" (Management) Options Are Feasible?
- Which Is The Best Option? The Basics of "Optimized Renewal Decision Making"

#### **Core Question 4: O&M (Continued)**

- Using AM To Drive Operations And Maintenance
- Moving Systematically Into Reliability Centered And Condition-Based Maintenance

#### **Core Question 4: CIP (Continued)**

- Using AAM To Drive CIP
- Strategic CIP Validation

# **Core Question 5: What Is My Best Long-Term Funding Strategy?**

- So, Valuation Really Does Matter?
- Determining A Sustainable Renewal Funding Level
- Effectively Telling The Funding Story
- The "Whole Of Business" Perspective Using AAM For Rate Setting & Budgeting
- Building Your First Asset Management Plan ("AMP")

# Focus Topic 1: Deploying an AAM Program (As time permits)

- The Four Fundamental Deployment Strategies
- "Gap Analysis" Benchmarking & Developing The AAM Improvement Program
- The Human Side
- The Political Side
- Implementation Work Plans Lessons Learned

#### **Closing Summary, Questions, Comments**

#### **About Our Trainers:**

Mr. Steve Allbee – USEPA Project Director, Gap Analysis; primary author, USEPA's The Clean Water and Drinking Water Infrastructure Gap Analysis; 25 years EPA – development of financing programs; BA, MA, MPA.

Mr. Doug Stewart, P.E. – Technical Director & Principal Consultant – GHD; editor, International Infrastructure Management Manual (sixth edition); former Asset Management Program Director, Orange County Sanitation District; 30 years engineering experience, 10 years utility management; BS, MSCE.

#### **Over Night Hotel Accommodations**

A limited number of rooms are available at the Hilton Madison Monona Terrace Hotel, (Connected to the Monona Terrace), at the CSWEA Workshop rate of \$149.00 per night plus tax. Reservations must be made by August 9, 2008 by calling 608-255-5100 and asking for the CSWEA/USEPA Joint Conference Room Block. Additional rooms are available at the Best Western Inn at the Park which is in close walking distanced from the Monona Terrace, located at 22 South Carroll St, Madison WI. The room rate is \$109.00 single, \$119 double and 139.00 for suites per night plus tax. Reservations may be made by calling 800-279-8811 before August 8, 2009 and ask for the CSWEA/USEPA Joint Conference Room Block.

More information about the workshop and asset management is available at <a href="https://www.epa.gov/owm/assetmanage/assets\_training.htm">www.epa.gov/owm/assetmanage/assets\_training.htm</a>

Registration Questions? Contact Eric Lecuyer, CSWEA Executive Director at <a href="mailto:erlec@prodigy.net">erlec@prodigy.net</a> or 815-954-2714.

Registration fee for workshop is \$200.00, which includes workshop, workshop materials continental breakfast and lunch daily. Seats are limited, so please register early. No refunds if registrations are cancelled after August 29, 2008.



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### **Registration Form**

Please register on line at <a href="www.CSWEA.org">www.CSWEA.org</a> Visa, MasterCard, American Express and Discover Card are accepted via on-line registration. Pre-registration is required, no on-site registration is available.

Name	Badge Name
Organization	Title
Mailing Address	
City, State, Zip Code	
Daytime Phone	Email
Registration Fee www.CSWEA.org)	\$ 200.00 (on-line registration with credit card payment available at

Please mail registration with a check made out to Central States Water Environment Association to

Central States Water Environment Association USEPA Asset Management Workshop 3809 Shenandoah Drive Crystal Lake, IL 60012

Questions: Contact Eric Lecuyer at 815-954-2714 or erlec@prodigy.net